

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

JOINT APPLICATION OF KENTUCKY UTILITIES)	
COMPANY AND LOUISVILLE GAS AND)	CASE NO.
ELECTRIC COMPANY FOR APPROVAL OF)	2016-00063
DEPRECIATION RATES FOR BROWN SOLAR)	

ORDER

On January 29, 2016, Kentucky Utilities Company and Louisville Gas and Electric Company (jointly “the Companies”) filed an application seeking approval of the proposed depreciation rates for the solar photovoltaic facility the Companies are constructing at the E. W. Brown Generating Station (“Brown Solar Facility”).

Pursuant to the Commission’s Order issued on February 19, 2016, a procedural schedule was established providing for, among other things, two rounds of discovery. There are no intervenors in this matter. On March 16, 2016, the Companies filed a letter requesting that the Commission submit this case for a decision based upon the record.

DISCUSSION

In Case No. 2014-00002, the Commission granted a Certificate of Public Convenience and Necessity authorizing the Companies to construct the 10-megawatt Brown Solar Facility.¹ The Companies commenced construction and presently have the

¹ Case No. 2014-00002, *Joint Application of Louisville Gas & Electric Company and Kentucky Utilities Company for Certificates of Public Convenience and Necessity for the Construction of a Combined Cycle Combustion Turbine at the Green River Generating Station and a Solar Photovoltaic Facility at the E.W. Brown Generating Station* (Ky. PSC Dec. 19, 2014)

facility in place. They anticipate testing for commissioning purposes prior to placing the photovoltaic solar resource into operation with a goal of the summer of 2016.

As part of the Companies' base rate proceedings in Case Nos. 2012-00221 and 2012-00222, the Commission approved depreciation rates for the Companies in 2012.² Those depreciation rates were arrived at using the Average Service Life methodology. The depreciation rates were also established based on the Companies' service lives records and historical data; the cost of the assets were then allocated over the useful lives of those assets.

As part of the Companies' most recent base rate proceedings in Case Nos. 2014-00371 and 2014-00372, the Commission issued Orders which approved, among other things, depreciation rates for the Companies' recently constructed natural gas-fired, combined-cycle generating unit, Cane Run Unit 7 ("CR7").³ The Companies assert that the depreciation rates as established in 2012 and for CR7 are not appropriate for the Brown Solar Facility.

The Companies anticipate depreciating the Brown Solar Facility starting in May 2016, which is when the unit is expected to commence commercial operation. The Companies request generator-specific depreciation rates for this utility-grade solar facility be in place prior to the commencement of commercial operation. If the proposed depreciation rates for the Brown Solar Facility are not approved by April 29, 2016,

² Case No. 2012-00221, *Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates* (Ky. PSC Dec 20, 2012); Case No 2012-00222, *Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates, a Certificate of Public Convenience and Necessity, Approval of Ownership of Gas Service Lines and Risers, and a Gas Line Surcharge* (Ky. PSC Dec. 20, 2012).

³ Case No. 2014-00371, *Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates* (Ky. PSC June 30, 2015); Case No. 2014-00372, *Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates* (Ky. PSC June 30, 2015).

the Companies state they will have to use the most recently approved depreciation rates for their generating assets, which would be those used for CR7, even though the rates are not appropriate for the Brown Solar Facility.

The Companies have no historical service lives recorded on their books for a utility-grade solar generator comparable to the Brown Solar Facility, nor are historical service-life depreciation records readily accessible for the photovoltaic industry. The Companies therefore retained John J. Spanos of Gannet Fleming Valuation and Rate Consultants, LLC. to develop depreciation rates for the Brown Solar Facility.

Mr. Spanos recommended depreciation rates consistent with the Average Service Life methodology using an interim survivor curve, net salvage percent, and the facility's likely retirement date. To develop these utility-scale solar depreciation rates, the accounts are based on similar facilities in the United States with a projected life span of 25 years for the Brown Solar Facility.⁴ The proposed Average Service Life methodology is consistent with the depreciation methodologies used consistently by the Companies in their past rate cases.

The total estimated cost of the Brown facility is approximately \$29 million, and the annual depreciation expense is roughly \$1,312,833. The depreciation rates proposed by the Companies for the Brown Solar facility are as follows:

Account 341 - Structures and Improvements	4.24%
Account 344 - Generators	4.61%
Account 345 - Accessory Electric Equipment	4.36%
Account 346 - Miscellaneous Power Plant Equipment	4.25%

⁴ Companies' response to Commission Staff's Initial Request for Information, Item 1.d.

FINDINGS

The Commission identifies and agrees with the need for the Companies to develop depreciation rates consistent with a utility scale solar photovoltaic generating unit. We further recognize that the Companies are devoid of internal historical depreciation rates for such a facility. As noted in responses to Commission staff's data requests, historical information nationwide for a facility of this type is not readily available and is being developed using informed judgement.⁵

In further support of the Companies' position that utility-scale solar generation is evolving, Commission staff requested a copy of all depreciation studies completed by Mr. Spanos of Gannet Fleming Valuation and Rate Consultants, LLC, who was retained by the Companies to perform a systemwide depreciation study as of December 31, 2015. The Companies responded that "Mr. Spanos has not performed full depreciation studies on solar assets because the technology is too young to have experienced a full life cycle."⁶ However, Mr. Spanos did provide depreciation information with respect to 19 utility-scale solar facilities in operation in the United States which indicate the Companies' proposed rates fall within the range of the high and low rates approved in those states.⁷ The Commission finds this position reasonable.

The depreciation rates proposed in this case should to be utilized until completion of a new study and additional information is available about the solar facility.⁸

⁵ *Id.*, Item 1.b.

⁶ *Id.*, Item 3.

⁷ *Id.*, Item 1.a.

⁸ *Id.*, Item 2.

The Commission finds that the Companies proposed depreciation rates for the Brown Solar facility are reasonable and should be approved.

IT IS THEREFORE ORDERED that the Companies' proposed depreciation rates for the Brown Solar Facility are approved.

By the Commission

ENTERED
APR 08 2016
KENTUCKY PUBLIC
SERVICE COMMISSION

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